AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A spark plug comprising:

a central electrode;

an insulator provided outside said central electrode;

a main metal shell provided outside said insulator; and

a ground electrode provided to oppose to said central electrode to define a spark discharge gap;

wherein a surface of said main metal shell is coated with a complex chromate coat that contains a chromium component comprising at least 90wt% of trivalent chromium and at least one component of a phosphorus component in an amount of 1 to 15wt% as calculated for PO_4 and a silicon component in an amount of 5 to 75 wt% as calculated for SiO_2 as cationic components.

2. (Original) The spark plug according to claim 1, wherein the surface of said main metal shell is coated with the complex chromate coat that contains the chromium component comprising at least 90wt% of trivalent chromium and the phosphorus component in an amount of 1 to 15wt% as calculated for PO_4.

3. (Original) The spark plug according to claim 1, wherein said complex chromate coat contains a phosphorus component dispersing chromate layer in which the phosphorus component is dispersed in a trivalent chromium based compound, said phosphorus component being present in an amount of 2 to 15 wt% as calculated for PO_4.

4. (Original) The spark plug according to claim 1, wherein the chromium component comprising at least 90wt% of trivalent chromium and the phosphorus component in an amount of 5 to 10wt% as calculated for PO_4.

5. (Original) The sparkplug according to claim 1, wherein the surface of said main metal shell is coated with the complex chromate coat that contains the chromium component comprising at least 90wt% of trivalent chromium and the silicon component in an amount of 5 to 75 wt% as calculated for SiO_2 as cationic components.

6. (Original) The spark plug according to claim 3, wherein said complex chromate coat contains a silicon component dispersing chromate layer having such a structure that the silicon component is dispersed in a trivalent chromium based compound, said silicon component being present in an amount of 10 to 40 wt% as calculated for SiO_2.

7. (Original) The spark plug according to claim 4, wherein said silicon component dispersing chromate layer contains the phosphorus component in an amount of 1 to 15 wt% as calculated for PO_4.

8. (Original) The spark plug according to claim 1, wherein the chromium component comprising at least 90wt% of trivalent chromium and the silicon component in an amount of 10 to 40 wt% as calculated for SiO_2 as cationic components.

9. (Original) The spark plug according to any one of claims 1 to 8, further comprising an annular gasket to be fitted around the basal end portion of a mounting threaded section formed on a peripheral surface of said main metal shell, at least a part of the surface of said gasket being coated with said complex chromate coat.

10. (Currently Amended) The spark plug according to claim 1 further comprising a zinc plate coat underlying said complex chromate coat, which, when subjected to "5. Neutral Salt Spray Test" according to the plate corrosion resistance test procedure specified in JIS H8502, can withstand for at least 40 hours before at least about 20% of the whole surface of the main metal shell is coated with white rust due to corrosion of ~~a~~the zinc plate coat.

11. (Currently Amended) The spark plug according to claim 1 further comprising a zinc plate coat underlying said complex chromate coat, which, when subjected to "5. Neutral Salt

Spray Test" according to the plate corrosion resistance test procedure specified in JIS H8502 after heating at 200 °C for 30 minutes in air atmosphere, can withstand for at least 40 hours before at least about 20% of the whole surface of the main metal shell is coated with white rust due to corrosion of ~~a~~the zinc plate coat.

12. (Previously Amended) A method for producing a spark plug according to claim 1, said method including a chromating step which comprises immersing said main metal shell into a chromating bath containing phosphoric acid or a phosphate so as to form a phosphorus component dispersing chromate coat on the surface of said main metal shell, at least 90 wt% of the chromium component in said coat being trivalent chromium and the phosphorus component from said phosphoric acid or phosphate being present in an amount of 2 to 15 wt% as calculated for PO_4.

13. (Previously Amended) A method for producing a spark plug according to claim 1, said method including a chromating step which comprises immersing said main metal shell into a chromating bath containing an alkali silicate so as to form a silicon component dispersing chromate coat on the surface of said main metal shell, at least 90 wt% of the chromium component in said coat being trivalent chromium and the silicon component from said alkali silicate being present in an amount of 10 to 40 wt% as calculated for SiO_2.

14. (Original) The method for producing a spark plug according to claim 13, wherein said chromating bath also contains phosphoric acid or a phosphate and said silicon component dispersing chromate coat is such that the phosphorus component from said phosphoric acid or phosphate is present in an amount of 1 to 15 wt% as calculated for PO_4.

15. (New) The spark plug according to claim 10, wherein said zinc plate coat has a thickness of about 3 to 10μm.

16. (New) The spark plug according to claim 11, wherein said zinc plate coat has a thickness of about 3 to 10μm.